

# Selected Financial Data (cont.)

(In thousands, except per share data)

	Year Ended December 31,				
	1987(1)	1988	1989	1990	1991
<b>Statement of Operations Data:</b>					
Sales	\$ 258	\$ 1,383	\$ 6,017	\$ 14,770	\$ 18,748
Cost of sales	<u>252</u>	<u>1,021</u>	<u>4,012</u>	<u>10,123</u>	<u>11,563</u>
Gross profit	6	362	2,005	4,647	7,185
Operating expenses:					
Research and development	1,060	2,750	2,714	2,835	1,963
Marketing, general and administrative	1,343	4,348	6,976	10,654	10,640
Charge for purchase of in-process research and development	<u>855</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total operating expenses	<u>3,258</u>	<u>7,098</u>	<u>9,690</u>	<u>13,489</u>	<u>12,603</u>
Operating loss	(3,252)	(6,736)	(7,685)	(8,842)	(5,418)
Interest income	123	281	421	1,181	433
Contract settlement	<u>-</u>	<u>-</u>	<u>-</u>	<u>687</u>	<u>-</u>
Net loss	<u>\$ (3,129)</u>	<u>\$ (6,455)</u>	<u>\$ (7,264)</u>	<u>\$ (6,974)</u>	<u>\$ (4,985)</u>
Loss per common share(2)	<u>\$ (1.01)</u>	<u>\$ (1.21)</u>	<u>\$ (1.02)</u>	<u>\$ (0.71)</u>	<u>\$ (0.50)</u>
Weighted average shares outstanding(2)	3,113	5,343	7,121	9,760	9,927
<b>Balance Sheet Data:</b>					
Working capital	\$ 2,506	\$ 3,982	\$21,163	\$13,556	\$13,554
Total assets	4,349	7,459	27,191	22,269	22,991
Total stockholders' equity	3,758	6,266	25,524	18,925	15,965

- (1) Statement of operations data is for the period from March 10, 1987 (inception) through December 31, 1987. Summarized operating results for the Predecessor for the period from January 1, 1987 through March 18, 1987, are as follows (in thousands):

Sales	\$252
Cost of sales	\$130
Operating expenses	\$186
Net loss	\$ 64

- (2) The Company completed an initial public offering in November, 1989, in connection with which all outstanding shares of Preferred Stock were converted into shares of Common Stock. For periods prior to the initial public offering, the number of shares used in the calculation of net loss per share is computed as if all of the outstanding shares of Preferred Stock, including shares issued as stock dividends on the Preferred Stock, were converted into Common Stock. The number of shares used in the calculation of net loss per share further assumes no exercise of outstanding employee stock options, except for certain antidilutive stock options with respect to 224,400 shares of Common Stock granted in March, 1989, the exercise of which has been assumed. Utilizing the treasury stock method of computing the weighted average number of shares, the assumed exercise of the options granted in March, 1989, results in a net increase of 62,487 shares in the weighted average number of shares presented for the periods ending December 31, 1987 and 1988, a net increase of 63,563 shares for the period ending December 31, 1989, a net increase of 70,263 shares for the period ending December 31, 1990, and a net increase of 62,520 shares for the period ending December 31, 1991. Share and per share amounts for all periods presented have been adjusted to reflect the Company's February 1992 three for two Common Stock split. See Note 1 to consolidated financial statements included elsewhere herein.

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

**OVERVIEW**

The Company's financial results are characterized by an increasing world-wide demand for products and services involving radio frequency electronic identification technology in the transportation industry. From inception, the Company's sales have steadily risen as sales volumes have increased resulting from acceptance of the Company's technology by large scale end users and industry standard setting bodies, aided by an expanding network of distributors and dealers. The Company's products and services include proprietary manufactured RFID products, third party equipment, related installation, maintenance and training services and new product development contracts. Gross profit margins realized on the Company's sales may be affected by the relative sales mix from one period to another. Margins on the Company's proprietary manufactured products are generally higher than those realized from sales of other equipment and services. The Company generally markets its products through distributors and dealers; however in certain circumstances, direct end user sales are made which may result in higher margins in individual cases.

Significant expenditures have been incurred for product research and development, for marketing efforts to establish the Company's technology as the leading identification technology in its targeted markets and generally to build an organization to facilitate the management of the Company's anticipated growth. Sales volumes have not yet reached a level required to support these operating expenses and to achieve manufacturing economies of scale necessary to obtain normal margins and profitability.

The Association of American Railroads has made its previously voluntary standard on automatic equipment identification mandatory as of early 1992. This standard, which is based on the Company's radio frequency product line, is expected to have a positive effect on the Company's revenue growth. See "Industry Standards."

**RESULTS OF OPERATIONS**

**Comparison of the Year Ended December 31, 1990 to the Year ended December 31, 1991**

*Sales* — The increase in sales of \$3,978,000 or 27% is primarily attributable to an increase in the sales volume of the Company's proprietary manufactured products. Also contributing to the increase was further product sales and installation of an electronic toll collection system on a statewide turnpike system, and increased operations at the Dallas North Tollway system.

*Cost of Sales and Gross Profit* — Gross profit as a percentage of sales increased from 31% in 1990 to 38% in 1991. This increase was primarily due to increased sales of the Company's proprietary manufactured products and, to a lesser extent, the manufacturing economies of scale gained from increased production volumes.

*Research & Development* — Research and development expenditures decreased by 2% from \$4,854,000 in 1990 to \$4,762,000 in 1991, primarily attributable to a reduction of professional and consulting fees from \$491,000 in 1990 to \$81,000 in 1991 due to the reduced requirement for outside consultants on the current year's projects in connection with customer contracts for new products, and general cost controls. This decrease was partially offset by an increase in research tools and supplies consumed from \$586,000 in 1990 to \$811,000 in 1991. Research and development expenditures of \$2,305,000 in 1990 and \$2,798,000 in 1991 were included in cost of sales pursuant to customer contracts, which includes expenditures of \$2,705,000 in 1990 and \$1,946,000 in 1991

relating specifically to certain research and development arrangements with customers for new products.

**Marketing, General and Administrative** — In the aggregate, marketing, general and administrative expenses decreased from \$10,654,000 in 1990 to \$10,640,000 in 1991. Employee compensation expenses rose from \$4,772,000 in 1990 to \$5,416,000 in 1991 partly due to the full year effect in 1991 of the 1990 expansion of the sales and support office in Paris, France (Amtech SARL) and opening of a sales and support office in Eindhoven, The Netherlands. Also, employment contracts with certain executive officers provided for increases in their 1991 salaries over 1990 amounts. Occupancy costs increased from \$537,000 in 1990 to \$896,000 in 1991 as a result of the expiration of the Company's lease and relocation to other, expanded corporate facilities in November 1990. The European sales and support offices helped reduce the requirements for international travel leading to a decrease in travel and entertainment expenses from \$1,241,000 in 1990 to \$925,000 in 1991. Professional and consulting fees decreased from \$941,000 in 1990 to \$684,000 due to overall cost controls and Company personnel administering more of the Company's requirements.

The transfer of Amtech SAPL's operations to the Alcatel Amtech S.A. joint venture coupled with the related consolidation into Alcatel Amtech S.A. of the activity of the sales and support office in Eindhoven, The Netherlands in early 1992 will produce a downward effect on 1992 marketing, general and administrative expenses. Additionally, employment contracts with certain retiring executive officers have been replaced with consulting contracts at reduced levels of compensation.

**Interest and Other Income** — Interest income decreased 63% from \$1,181,000 in 1990 to \$433,000 in 1991 primarily resulting from the reduction in cash available for investment during most of 1991 coupled with an overall decline in the interest rates earned on short-term money market funds.

Other income in 1990 included a non-recurring \$687,000 compensatory payment made by the government of Norway as a result of its cancellation of the Company's contract with an entity owned by the City of Oslo. The proceeds reimbursed the Company for costs incurred in bidding on and preparing to implement the contract.

#### **Comparison of the Year Ended December 31, 1989 to the Year ended December 31, 1990**

**Sales** — Sales increased by 145% from \$6,017,000 in 1989 to \$14,770,000 in 1990. Sales in 1989 included further shipments of a toll collection system that began in late 1988, installation of a project site system for an intermodal application, new product development contracts, and delivery of additional evaluation systems to approximately 30 customers. Sales in 1990 included the sale of a turnkey automatic vehicle identification system at a major U.S. airport, an electronic toll collection system on a statewide turnpike system, additional new product development contracts, and increased activity from a full year of operations at the Dallas North Tollway system.

**Cost of Sales and Gross Profit** — Gross profit as a percentage of sales decreased from 33% in 1989 to 31% in 1990, primarily due to several lower margin engineering and market development contracts. Additionally, even though the aggregate sales of the Company's proprietary products increased from 1989 to 1990, these sales decreased in their relative proportion to total sales partly because of significant revenues realized from systems integration services and new product development contracts. This decrease in the gross profit margin was partially offset by certain large scale turnkey commercial installations and to a lesser extent the manufacturing economies of scale gained from increased production volumes.

**Research & Development** — Research and development expenditures increased 36% from ~~from~~ \$3,563,000 in 1989 to \$4,854,000 in 1990, primarily attributable to an increase in employee ~~see~~ compensation expense from \$2,306,000 in 1989 to \$2,798,000 in 1990. The number of research ~~and~~ development personnel increased to meet market demands for new products and enhancements ~~in~~ in addition to the manpower required to support specific customer product development contracts. ~~There~~ increase in the activity associated with these new product development contracts also contributed ~~to~~ to an increase in expenditures for research tools and supplies from \$344,000 in 1989 to \$586,000 ~~in~~ in 1990. Research and development expenditures of \$849,000 in 1989 and \$2,305,000 in 1990 ~~were~~ included in cost of sales pursuant to contracts with customers for new products.

**Marketing, General and Administrative** — Marketing, general and administrative ~~see~~ expenses increased 53% from \$6,976,000 in 1989 to \$10,654,000 in 1990. The Company continued ~~in~~ in 1990 to build its marketing, general and administrative functions to support anticipated future ~~are~~ growth. Employee compensation expenses increased from \$3,294,000 in 1989 to \$4,772,000 in 1990 ~~1990~~, primarily as a result of the addition of personnel, including the expansion of the sales and support ~~support~~ office in Paris, France, and the opening of a sales and support office in Eindhoven, ~~The~~ the Netherlands. Also contributing to the increase in emp. yee compensation expenses ~~were~~ were employment contracts with certain executive officers that provided for increases in their previous ~~ous~~ salaries. Travel and entertainment expenses, which include costs associated with representation ~~on~~ at trade shows and demonstration and marketing of the Company's products to prospective ~~ave~~ domestic and international customers and distributors, increased from \$781,000 in 1989 ~~to~~ to \$1,241,000 in 1990. Also contributing to the increase was occupancy costs, which increased from ~~from~~ \$324,000 in 1989 to \$537,000 in 1990 as a result of the expiration of the Company's lease ~~and~~ relocation to other, expanded corporate facilities in November 1990 and the costs related to ~~the~~ the foreign sales and support offices.

**Interest and Other Income** — Interest income increased 181% from \$421,000 in 1989 ~~to~~ to \$1,181,000 in 1990 primarily as a result of additional short-term investments made using ~~cash~~ cash received from the Company's initial public offering in November 1989.

Other income in 1990 includes a \$687,000 compensatory payment made by the government ~~of~~ of Norway as a result of its cancellation of the Company's contract with an entity owned by the City ~~of~~ of Oslo. The proceeds reimbursed the Company for costs incurred in bidding on and preparing ~~to~~ to implement the contract.

## LIQUIDITY AND CAPITAL RESOURCES

The Company satisfied its liquidity needs during 1991 principally from cash on hand ~~at the~~ the beginning of the year, reduction in accounts receivable, the receipt of approximately \$6,000,000 ~~in~~ in conjunction with the formation of the Alcatel Amtech S.A. joint venture (see Note 11 ~~to the~~ the Company's Consolidated Financial Statements) and the exercise of employee stock options.

The Company expects to invest approximately \$1,000,000 in 1992 for capital expenditures, ~~the~~ the majority of which will be incurred for additional automated production equipment which ~~will~~ will increase manufacturing capacity to meet expected production requirements, particularly ~~for~~ for anticipated rail tag demand resulting from the AAR mandatory standard. There ~~were~~ were no significant commitments for capital expenditures as of December 31, 1991.

At December 31, 1991, working capital of \$13,554,000 remained relatively unchanged ~~and~~ as compared to December 31, 1990. Additionally, the Company expects to receive an additional ~~of~~ \$2,000,000 in 1992 pursuant to the Alcatel Amtech S.A. joint venture agreement, upon ~~the~~ the Company's completion of certain new product development work. The Company believes ~~that~~ that revenues from operations, together with existing liquid assets and available sources of financing ~~will~~ will be sufficient to fund the Company's 1992 working capital requirements.

**Item 8. Financial Statements and Supplementary Data**

The information required by this item begins on page F-1 hereof.

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

**PART III**

**Item 10. Directors and Executive Officers**

The information regarding directors and executive officers set forth under "Management -- Directors and Executive Officers" in the Company's 1992 Proxy Statement to be filed with the Securities and Exchange Commission is incorporated herein by reference pursuant to General Instruction G(3) to Form 10-K.

**Item 11. Executive Compensation**

The information regarding compensation of directors and executive officers set forth under "Management -- Compensation of Executive Officers and Directors" and "Management -- Employee Benefit Plans" in the Company's 1992 Proxy Statement to be filed with the Securities and Exchange Commission is incorporated herein by reference pursuant to General Instruction G(3) to Form 10-K.

**Item 12. Security Ownership of Certain Beneficial Owners and Management**

The information regarding security ownership of certain beneficial owners and management set forth under "Principal Shareholders" in the Company's 1992 Proxy Statement to be filed with the Securities and Exchange Commission is incorporated herein by reference pursuant to General Instruction G(3) to Form 10-K.

**Item 13. Certain Relationships and Related Transactions**

The information regarding certain relationships and related transactions set forth under "Management -- Transactions with Management and Related Parties" in the Company's 1992 Proxy Statement to be filed with the Securities and Exchange Commission is incorporated herein by reference pursuant to General Instruction G(3) to Form 10-K.

## PART IV

### Item 14. Exhibits, Financial Statement Schedules and Reports on Form 8-K

(a)1 Financial statements - See Index to Consolidated Financial Statements on page F-1 hereof.

(a)2 Financial statement schedules.

Schedules are omitted because of the absence of the conditions under which they are required or because the information required is included in the consolidated financial statements or notes thereto.

(a)3 Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
3.1	-- Articles of Incorporation of the Company, together with all amendments thereto. Filed under exhibit number 3.1 in the Company's Registration Statement on Form S-1 (Commission No. 33-31209) and incorporated herein by reference.
3.2	-- Restated Bylaws of the Company, as amended.
4.1	-- Specimen Certificate for Common Stock of the Company. Filed under exhibit number 4.1 in the Company's Registration Statement on Form S-1 (Commission No. 33-31209) and incorporated herein by reference.
9.1	-- Form of Shareholders Voting Agreement and Irrevocable Proxy entered into by and among David P. Cook, Kenneth W. Anderson, H. Ross Perot, J. Michael Poss, Walter Brothers, John T. Walker, Jr., American President Companies, Ltd., Mitsubishi Corporation and Mitsubishi International Corporation. Filed under exhibit number 9.1 in the Company's Registration Statement on Form S-1 (Commission No. 33-31209) and incorporated herein by reference.
10.1	-- License Agreement dated March 31, 1989 by and between the Company and Amtech Logistics Corporation. Filed under exhibit 10.35 in the Company's Registration Statement on Form S-1 (Commission No. 33-31209) and incorporated herein by reference.
10.2	-- Joint Venture Agreement dated as of October 1, 1991, between the Company and Alcatel AVI S.A. Filed under exhibit number 2.1 in the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 1991 and incorporated herein by reference.
10.3	-- AVI-2 Manufacturing, Distribution and Technology License Agreement, dated as of October 10, 1991, between the Company and Alcatel Amtech S.A. Filed under exhibit number 2.2 in the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 1991 and incorporated herein by reference.
10.4	-- ISO Manufacturing, Distribution and Technology License Agreement, dated as of October 10, 1991, between the Company and Alcatel Amtech S.A. Filed under exhibit number 2.3 in the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 1991 and incorporated herein by reference.
10.5	-- Limited Guaranty Agreement, dated as of October 30, 1991, between the Company and Alcatel AVI S.A. Filed under exhibit number 2.4 in the

- Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 1991 and incorporated herein by reference.
- 10.6 -- 1988 Stock Option Plan of the Company. Filed under exhibit number 10.44 in the Company's Registration Statement on Form S-1 (Commission No. 33-31209) and incorporated herein by reference.
  - 10.7 -- 1989 Stock Option Plan of the Company. Filed under exhibit number 10.45 in the Company's Registration Statement on Form S-1 (Commission No. 33-31209) and incorporated herein by reference.
  - 10.8 -- 1990 Stock Option Plan of the Company. Filed under Appendix A in the Company's Proxy Statement for Annual Meeting of Shareholders on May 24, 1990 and incorporated herein by reference.
  - 10.9 -- 401 (k) Retirement Plan of the Company. Filed under exhibit number 10.46 in the Company's Registration Statement on Form S-1 (Commission No. 33-31209) and incorporated herein by reference.
  - 10.10 -- Amended Employment Agreement dated January 1, 1991 by and between the Company and G. Russell Mortenson.
  - 10.11 -- Amendment to Employment Agreement dated January 10, 1992 by and between the Company and G. Russell Mortenson.
  - 10.12 -- Employment Agreement dated August 1, 1990 by and between the Company and Jeremy A. Landt.
  - 10.13 -- Employment Agreement dated August 6, 1991 by and between the Company and Steve M. York.
  - 10.14 -- Employment Agreement dated August 1, 1990 by and between the Company and William D. Powers.
  - 10.15 -- Consulting agreement dated November 7, 1991 by and between the Company and Michael R. Corboy.
  - 10.16 -- Consulting agreement dated November 7, 1991 by and between the Company and Kenneth W. Anderson.
  - 22.1 -- Subsidiaries of the Company.
  - 24.1 -- Consent of Independent Auditors.
  - 25.1 -- Power of attorney (included on page 20 of this Annual Report on Form 10-K).

**(b) Reports on Form 8-K**

None were filed during the fiscal quarter ending December 31, 1991.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dallas, State of Texas on February 25, 1992.

### AMTECH CORPORATION

By: /s/ Steve M. York  
Steve M. York  
Vice President, Chief Financial  
Officer and Treasurer

## POWER OF ATTORNEY

We, the undersigned, directors and officers of Amtech Corporation (the "Company"), do hereby severally constitute and appoint G. Russell Mortenson and Steve M. York and each or either of them, our true and lawful attorneys and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1991, and to file the same with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys and agents, and each or either of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys and agents, and each of them, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ G. Russell Mortenson</u> (G. Russell Mortenson)	President, Chief Executive Officer and Director (Principal Executive Officer)	February 25, 1992
<u>/s/ Steve M. York</u> (Steve M. York)	Vice President, Chief Financial Officer, and Treasurer (Principal Financial and Accounting Officer)	February 25, 1992



<u>/s/ Kenneth W. Anderson</u> (Kenneth W. Anderson)	Director	February 25, 1992
<u>/s/ Michael R. Corboy</u> (Michael R. Corboy)	Director	February 25, 1992
<u>/s/ Ken-Ichi Kubota</u> (Ken-Ichi Kubota)	Director	February 25, 1992
<u>/s/ Jeremy A. Landt</u> (Jeremy A. Landt)	Director	February 25, 1992
<u>/s/ James S. Marston</u> (James S. Marston)	Director	February 25, 1992

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**The Board of Directors and Stockholders  
Amtech Corporation**

We have audited the accompanying consolidated balance sheets of Amtech Corporation as of December 31, 1991 and 1990, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 1991. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Amtech Corporation at December 31, 1991 and 1990, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1991, in conformity with generally accepted accounting principles.

*Ernst & Young*

**ERNST & YOUNG**

Dallas, Texas  
February 7, 1992

## AMTECH CORPORATION

## CONSOLIDATED BALANCE SHEETS

December 31, 1991 and 1990

<b>ASSETS</b>	<b><u>1991</u></b>	<b><u>1990</u></b>
Current assets:		
Cash and short-term investments	\$ 11,964,000	\$ 7,459,000
Accounts receivable, net of allowance for doubtful accounts of \$152,000 in 1991 and \$110,000 in 1990 (Note 11)	2,123,000	5,815,000
Inventories (Note 2)	3,677,000	3,487,000
Prepaid expenses	<u>107,000</u>	<u>139,000</u>
 Total current assets	 17,871,000	 16,900,000
 Equipment and improvements, at cost (Note 3)	 7,481,000	 6,463,000
 Accumulated depreciation	 <u>(3,198,000)</u>	 <u>(1,953,000)</u>
	4,283,000	4,510,000
 Other assets	 <u>337,000</u>	 <u>859,000</u>
	 <u>\$ 22,991,000</u>	 <u>\$ 22,269,000</u>

AMTECH CORPORATION

CONSOLIDATED BALANCE SHEETS (Continued)

December 31, 1991 and 1990

<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>1991</b>	<b>1990</b>
<b>Current liabilities:</b>		
Accounts payable	\$ 935,000	\$ 893,000
Accrued expenses	1,685,000	1,238,000
Customer advance payments	<u>1,697,000</u>	<u>1,213,000</u>
Total current liabilities	4,317,000	3,344,000
Deferred license revenues (Note 11)	2,709,000	-
Commitments (Notes 7 and 11)		
<b>Stockholders' equity (Notes 1 and 5):</b>		
Preferred stock, \$1 par value, 10,000,000 shares authorized; none outstanding	-	-
Common stock, \$.01 par value, 30,000,000 shares authorized; shares issued and outstanding: 10,138,515 in 1991 and 9,727,049 in 1990	101,000	97,000
Additional paid-in capital	44,671,000	42,650,000
Accumulated deficit	<u>(28,807,000)</u>	<u>(23,822,000)</u>
Total stockholders' equity	<u>15,965,000</u>	<u>18,925,000</u>
	<u>\$ 22,991,000</u>	<u>\$ 22,269,000</u>

See accompanying notes.

# AMTECH CORPORATION

## CONSOLIDATED STATEMENTS OF OPERATIONS

Years ended December 31, 1991, 1990 and 1989

	<u>1991</u>	<u>1990</u>	<u>1989</u>
Sales (Note 8)	\$ 18,748,000	\$ 14,770,000	\$ 6,017,000
Operating costs and expenses:			
Cost of sales	11,563,000	10,123,000	4,012,000
Research and development	1,963,000	2,835,000	2,714,000
Marketing, general and administrative	10,640,000	10,654,000	6,976,000
	<u>24,166,000</u>	<u>23,612,000</u>	<u>13,702,000</u>
Operating loss	(5,418,000)	(8,842,000)	(7,685,000)
Other income:			
Interest	433,000	1,181,000	421,000
Contract settlement (Note 9)	<u>—</u>	<u>687,000</u>	<u>—</u>
	<u>433,000</u>	<u>1,868,000</u>	<u>421,000</u>
Net loss	<u>\$ (4,985,000)</u>	<u>\$ (6,974,000)</u>	<u>\$ (7,264,000)</u>
Loss per share (Note 1)	<u>\$ (0.50)</u>	<u>\$ (0.71)</u>	<u>\$ (1.32)</u>
Weighted average shares outstanding	<u>9,926,940</u>	<u>9,759,515</u>	<u>5,517,680</u>
Pro forma loss per share (Note 1)	<u>N/A</u>	<u>N/A</u>	<u>\$ (1.02)</u>
Pro forma weighted average shares outstanding	<u>N/A</u>	<u>N/A</u>	<u>7,121,487</u>

See accompanying notes.

# AMTECH CORPORATION

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Years ended December 31, 1991, 1990 and 1989

	Preferred stock						Common stock		Additional	Accumulated	Total
	Series A		Series B		Series C		Common stock		paid-in	deficit	stockholders'
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	capital		equity
Balance, December 31, 1988	489,334	\$ 489,000	50,916	\$ 51,000	50,916	\$ 51,000	4,583,014	\$ 46,000	\$ 15,213,000	\$ (9,584,000)	\$ 6,266,000
Issuance of stock dividends	26,142	26,000	3,455	3,000	3,455	3,000	-	-	(32,000)	-	-
Issuance of stock for cash	-	-	35,633	36,000	35,633	36,000	628,960	6,000	4,922,000	-	5,000,000
Conversion of preferred stock to common stock	(515,476)	(515,000)	(90,004)	(90,000)	(90,004)	(90,000)	1,669,158	17,000	679,000	-	-
Initial public offering of common stock, net of offering costs (Note 5)	-	-	-	-	-	-	2,760,000	27,000	21,495,000	-	21,522,000
Net loss	-	-	-	-	-	-	-	-	-	(7,264,000)	(7,264,000)
Balance, December 31, 1989	-	-	-	-	-	-	9,641,132	96,000	42,276,000	(16,848,000)	25,524,000
Exercise of stock options for cash (Note 5)	-	-	-	-	-	-	85,917	1,000	374,000	-	375,000
Net loss	-	-	-	-	-	-	-	-	-	(6,974,000)	(6,974,000)
Balance, December 31, 1990	-	-	-	-	-	-	9,727,049	97,000	42,650,000	(23,822,000)	18,925,000
Exercise of stock options for cash (Note 5)	-	-	-	-	-	-	411,466	4,000	2,021,000	-	2,025,000
Net loss	-	-	-	-	-	-	-	-	-	(4,985,000)	(4,985,000)
Balance, December 31, 1991	-	\$ -	-	\$ -	-	\$ -	10,138,515	\$ 101,000	\$ 44,671,000	\$ (28,807,000)	\$ 15,965,000

See accompanying notes.

# AMTECH CORPORATION

## CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended December 31, 1991, 1990 and 1989

	<u>1991</u>	<u>1990</u>	<u>1989</u>
Cash flows from operating activities:			
Net loss	\$ (4,985,000)	\$ (6,974,000)	\$ (7,264,000)
Adjustments to reconcile net loss to net cash from operating activities:			
Depreciation and amortization	1,488,000	1,140,000	1,117,000
Change in assets and liabilities:			
(Increase) decrease in accounts receivable	3,692,000	(3,973,000)	(837,000)
Increase in inventories	(197,000)	(1,782,000)	(731,000)
(Increase) decrease in prepaid expenses	32,000	(68,000)	(35,000)
Decrease in other assets	104,000	135,000	-
Increase in current liabilities	973,000	1,677,000	474,000
Increase in deferred license revenues	2,709,000	-	-
Total adjustments	<u>8,898,000</u>	<u>(2,871,000)</u>	<u>(522,000)</u>
Net cash provided (used) by operating activities	3,823,000	(9,845,000)	(7,786,000)
Cash flows from investing activities:			
Capital expenditures:			
Equipment and improvements	(1,130,000)	(1,898,000)	(2,468,000)
Other assets	(213,000)	(385,000)	(316,000)
Net cash used by investing activities	<u>(1,343,000)</u>	<u>(2,283,000)</u>	<u>(2,784,000)</u>
Cash flows from financing activities:			
Net proceeds from initial public offering of common stock	-	-	21,522,000
Net proceeds from other issuances of common and preferred stock	<u>2,025,000</u>	<u>375,000</u>	<u>5,000,000</u>
Net cash provided by financing activities	<u>2,025,000</u>	<u>375,000</u>	<u>26,522,000</u>
Increase (decrease) in cash and short-term investments	4,505,000	(11,753,000)	15,952,000
Cash and short-term investments, beginning of period	<u>7,459,000</u>	<u>19,212,000</u>	<u>3,260,000</u>
Cash and short-term investments, end of period	<u>\$ 11,964,000</u>	<u>\$ 7,459,000</u>	<u>\$ 19,212,000</u>
See accompanying notes.			



## AMTECH CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### 1. Summary of significant accounting policies

**Consolidation** - The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. Intercompany balances and transactions have been eliminated. Investments in equity investees are accounted for using the equity method of accounting.

**Inventories** - Inventories are stated at the lower of cost (first-in, first-out) or market.

**Depreciation and amortization** - Depreciation of equipment and improvements is provided using the straight-line method over estimated useful lives ranging from five to seven years.

Amortization of software is provided using the straight-line method over a period of five years.

Amortization of patents is provided on the straight-line basis over their remaining statutory lives. These lives range from ten to fifteen years.

Amortization of goodwill is provided on the straight-line basis over a period of twenty-five years.

**Revenue recognition** - Generally, sales are recorded when products are shipped or services are rendered. Sales under research and development and construction-type contracts are recorded as costs are incurred and include estimated profits calculated on the basis of the relationship between costs incurred and total estimated costs (cost-to-cost type of percentage-of-completion method of accounting). In the period in which it is determined that a loss will result from the performance of a contract, the entire amount of the estimated ultimate loss is charged against income.

**Research and development arrangements** - The Company enters into contracts to perform certain research and development for others. In general, these contracts provide for an initial period of prototype design, followed by further development and product engineering as required to produce preproduction prototypes. The Company recognized cost of sales of \$1,946,000, \$2,305,000 and \$849,000 for research and development contracts in 1991, 1990 and 1989, respectively.

**Statements of cash flows** - The Company's short-term investments, primarily money market funds, have maturities of three months or less at the date of purchase and are considered cash equivalents in the accompanying consolidated statements of cash flows.

**Loss per share** - The computation of loss per share is based on the weighted average number of outstanding common shares. Additionally, in accordance with regulations of the Securities and Exchange Commission, antidilutive stock options granted in March, 1989, are included in weighted average shares outstanding for all periods presented. Net loss used in the 1989 computation is increased by the effects of preferred stock dividends.

Pro forma loss per share in 1989 assumes all outstanding shares of preferred stock were converted into shares of common stock since the date of their issuance.

**Segment data** - The Company operates in one industry segment, the designing, manufacturing and marketing of hardware and software products based on radio frequency electronic identification technology.

**Risk concentration** - Financial instruments which potentially subject the Company to concentrations of credit risk are short term cash investments and accounts receivable. The Company places its short term cash investments in investment grade, money market funds and limits the amount of credit exposure to any one financial institution. The Company sells products and services to a limited number of customers throughout the world associated with the transportation industry. The Company continuously evaluates the credit worthiness of its customers' financial condition and generally does not require collateral. The Company's allowance for doubtful accounts is based on current market conditions and losses on uncollectible accounts have consistently been within management's expectations.

**Common stock split** - In February 1992, the Company effected a three for two split of its common stock in the form of a stock dividend. Share and per share amounts for all periods presented have been adjusted to reflect this stock split.

## 2. Inventories

Inventories consist of the following:

	December 31	
	1991	1990
Raw materials	\$ 1,528,000	\$ 1,500,000
Work in process	1,334,000	1,426,000
Finished goods	815,000	561,000
	<u>\$ 3,677,000</u>	<u>\$ 3,487,000</u>

## 3. Equipment and Improvements

Equipment and improvements consist of the following:

	December 31	
	1991	1990
Manufacturing, test and other equipment	\$ 3,758,000	\$ 2,728,000
Computer equipment	2,680,000	2,573,000
Office equipment, furniture and fixtures	638,000	742,000
Other	405,000	420,000
	<u>\$ 7,481,000</u>	<u>\$ 6,463,000</u>

#### 4. Line of credit

Prior to the initial public offering in November, 1989 (Note 5), the Company obtained a bank line of credit up to \$2,000,000, of which \$1,000,000 was advanced to the Company. Advances were repaid upon receipt of the net proceeds of the public offering, and the line of credit agreement was terminated effective January 1990.

#### 5. Capital stock

**Initial public offering** - Effective November 8, 1989, the Company completed its initial public offering by selling 2,400,000 shares of its common stock. On November 21, 1989, the Company sold an additional 360,000 shares upon the exercise of an over-allotment option granted to the underwriters in connection with the initial public offering. Costs associated with the offering, including discounts granted to underwriters, were approximately \$2,398,000.

**Preferred stock** - Prior to the Company's initial public offering, dividends on preferred stock accumulated quarterly and were paid in shares of preferred stock. Each share of preferred stock was entitled to one vote on amendments to the Company's articles of incorporation and was convertible into 2.4 shares of common stock at various dates. Effective November 8, 1989, in conjunction with the initial public offering, each outstanding preferred share was automatically converted into common stock.

**Capital stock transactions** - The Company entered into an agreement with Mitsubishi Corporation and Mitsubishi International Corporation (collectively, "Mitsubishi") whereby the Company, in March 1989, sold to Mitsubishi 314,480 shares of common stock at \$6.25 per share and 35,633 shares of Series B preferred stock.

The Company entered into an agreement with American President Companies, Ltd. ("APC") whereby the Company, in March 1989, sold to APC 314,480 shares of common stock at \$6.25 per share and 35,633 shares of Series C preferred stock.

**Stock options** - The Company has non-qualified stock options outstanding to key employees under its 1988, 1989, and 1990 Stock Option Plans. All plans other than the 1990 Plan have been terminated as to future grants. Options granted under these plans are not less than the fair market value at the date of grant, and subject to termination of employment, expire ten years from date of grant, and are generally exercisable in annual installments over three to five years.

Additionally, certain options are outstanding resulting from grants by a predecessor Company.

The following is a summary of 1991 transactions in these plans:

	<u>Shares</u>	<u>Option Price</u>	
		<u>Per Share</u>	<u>Total</u>
Outstanding at December 31, 1990	903,255	\$ 0.06 - \$ 6.67	\$ 4,822,000
Granted	184,200	\$ 6.67 - \$19.17	1,989,000
Cancelled	(118,001)	\$ 6.25 - \$ 6.67	(783,000)
Exercised	(411,466)	\$ 0.06 - \$ 6.67	(2,025,000)
Outstanding at December 31, 1991	<u>557,988</u>	<u>\$ 0.06 - \$19.17</u>	<u>\$ 4,003,000</u>
Exercisable at December 31, 1991	<u>163,164</u>	<u>\$ 0.06 - \$ 6.67</u>	<u>\$ 630,000</u>

At December 31, 1991, 81,130 shares were available for future grants under the 1990 Stock Option Plan.

## **6. Income taxes**

In 1988, the Company adopted Statement of Financial Accounting Standards No. 96, "Accounting for Income Taxes" ("SFAS 96"), which requires the liability method of accounting for income taxes. Adoption of SFAS 96 had no significant impact on the Company's consolidated financial statements. In February 1992, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" ("SFAS 109"), superseding SFAS 96, which in certain circumstances enables increased recording of deferred tax assets. This new pronouncement is effective in 1993, although earlier adoption is encouraged. The Company has not determined the effect of adopting SFAS 109 on the consolidated financial statements but expects the immediate favorable impact, if any, will not be material.

At December 31, 1991, the Company had net operating loss carryforwards of approximately \$27,000,000 for both financial reporting and federal income tax purposes, of which approximately \$1,800,000 of the federal income tax carryforward will expire unutilized due to limitations from a change in ownership on March 18, 1987. The tax carryforwards expire beginning in 1998. There are differences between the federal income tax and financial statement carryforwards primarily due to deferred license revenues which have already been included in federal taxable income, the use of accelerated depreciation methods, and the capitalization of certain costs associated with purchase price allocations and start-up costs which are not currently deductible for federal income tax purposes. Research credits of \$500,000 are also available through 2006 to reduce future federal income taxes. The Tax Reform Act of 1986 (the "Act") contains an alternative minimum tax which, if taxable income is generated in the future, could result in the Company's being required to pay federal income taxes and defer recognition of its net operating loss carryforward over a longer period of time than would have been required under the tax laws in effect prior to enactment of the Act.

## **7. Commitments**

**Leases** - The Company leases its office and manufacturing facilities. Rental expense for 1991, 1990, and 1989 was \$1,032,000, \$599,000, and \$403,000, respectively. Approximately \$231,000 and \$195,000 in office rentals were paid to a related party in 1990 and 1989, respectively. Certain facility leases have renewal options ranging from one to five years.

Minimum future payments on operating leases with initial or remaining terms of one year or more at December 31, 1991, are as follows:

1992	\$	867,000
1993		714,000
1994		674,000
1995		551,000
1996		-
	\$	<u>2,806,000</u>

## **8. Significant customers, export sales, and foreign operations**

In 1991, the Company had one unrelated major customer which accounted for approximately 34% of sales. Four related party customers accounted for approximately 6% of sales. In 1990, the Company had two unrelated major customers which accounted for approximately 28% and 13% of sales, and three related party customers which accounted for approximately 6% of sales. In 1989, the Company had two major customers, which are also related parties, which accounted for approximately 20% and 10% of sales, and three other unrelated major customers which accounted for approximately 13%, 12%, and 11% of sales.

Export sales accounted for approximately 26%, 30%, and 42% of the Company's sales during the years ended December 31, 1991, 1990, and 1989, respectively.

Sales by geographic region are summarized as follows:

	or the year ended December 31,		
	1991	1990	1989
North America	76%	71%	59%
Far East	3%	6%	10%
Europe	21%	23%	31%

The Company's two European marketing and support offices incurred operating losses of \$1,559,000 and \$669,000 in 1991 and 1990, respectively, and accounted for \$279,000 of consolidated assets and \$93,000 of consolidated liabilities at December 31, 1991. See Note 11.

## 9. Contract settlement

Other income in 1990 includes a \$687,000 compensatory payment made by the government of Norway as a result of its cancellation of the Company's contract with an entity owned by the City of Oslo. The proceeds reimbursed the Company for costs incurred in bidding on and preparing to implement the contract.

## 10. Employee benefit plan

The Company has a retirement savings plan structured under Section 401(k) of the Internal Revenue Code. The plan covers substantially all employees meeting minimum service requirements. Under the plan, contributions are voluntarily made by employees and the Company may provide matching contributions based on the employees' contributions. The Company incurred no expense in 1991, \$60,000 in 1990 and \$27,000 in 1989 for matching contributions relating to this plan.

## 11. Joint venture

In October 1991 the Company entered into a joint venture with Alcatel AVI S.A., a subsidiary of Alcatel N.V. The resulting company, named Alcatel Amtech S.A. ("AASA"), is owned approximately 51% by Alcatel AVI S.A. and 49% by the Company. As part of the formation of the joint venture, the Company transferred its shares of Amtech SARL ("SARL"), formerly a wholly owned European subsidiary of the Company, to AASA.

Pursuant to various agreements between the Company and AASA, the Company received approximately \$2,400,000 for repayment of SARL's net intercompany advances, approximately \$2,800,000 for various manufacturing license and marketing license rights, and approximately \$650,000 for certain product development to be provided to AASA. Proceeds relating to the manufacturing license and marketing license rights are deferred and are being amortized over five years on a straight line basis. The Company is entitled to receive an additional \$2,000,000, to be provided by Alcatel AVI S.A., upon completion of certain new product development work and up to a further \$5,000,000 based on AASA's use of integrated circuit chips using the Company's proprietary technology. Additionally, Alcatel AVI S.A. has agreed to loan AASA specified amounts (increasing up to approximately \$5,500,000 in 1994), if needed for operations, with the Company severally guaranteeing such borrowings (none at December 31, 1991) in a proportion equal to the percentage of its equity ownership of AASA.

The net assets of SARL at December 31, 1990, approximately \$870,000, consisted primarily of working capital (including accounts receivable, inventories, accounts payable and accrued liabilities), and equipment and improvements. The Company had accounts receivable from AASA amounting to \$585,000 at December 31, 1991.

## **AMTECH CORPORATION**

### **Board of Directors**

Kenneth W. Anderson	Private Investor and Consultant
Michael R. Corboy	Private Investor and Consultant
Ken-ichi Kubota <sub>1</sub>	General Manager, Ship & Industrial Projects Department, Mitsubishi Corporation
Dr. Jeremy A. Landt <sub>2</sub>	Vice President, Technology and Manufacturing Division, Amtech Systems Corporation
James S. Marston <sub>1,2</sub>	Senior Vice President and Chief Information Officer, American President Companies, Ltd.
G. Russell Mortenson <sub>1,2</sub>	President and Chief Executive Officer, Amtech Corporation

1 Member of Audit Committee

2 Member of Stock Option Plan Committee

### **Principal Corporate Officers**

G. Russell Mortenson	President and Chief Executive Officer
Steve M. York	Vice President, Chief Financial Officer and Treasurer
Michael J. Breslin	Vice President, Marketing
Fredye Long Thornburg	General Counsel and Secretary

### **Principal Subsidiaries and Officers**

#### **Amtech Systems Corporation:**

G. Russell Mortenson	President
William D. Powers	Senior Vice President, Technology and Manufacturing Division
Michael J. Breslin	Senior Vice President, Marketing and Operations Division
Dr. Jeremy A. Landt	Vice President, Technology and Manufacturing Division
R. Rand Brown	Vice President
Douglas B. Davis	Vice President, Strategic Planning
Steve M. York	Treasurer
Fredye Long Thornburg	Secretary
Cheryl M. Smith	Assistant Secretary

#### **Amtech World Corporation:**

G. Russell Mortenson	President
Philippe M. Larue	Vice President, European Marketing
Rudolf F. Peelen	Vice President, Marketing*
Steve M. York	Treasurer
Fredye Long Thornburg	Secretary
Cheryl M. Smith	Assistant Secretary

### **European Affiliate**

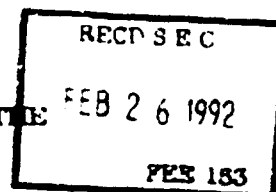
#### **Alcatel Amtech S.A.:**

Philippe M. Larue	Directeur Général
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SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
FORM 10-K



(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 1991

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

For the transition period from ..... to .....

Commission File Number: 0-17895

**AMTECH CORPORATION**

(Exact Name of Registrant as Specified in its Charter)

Texas  
(State of Incorporation)

75-2216818  
(I.R.S. Employer  
Identification Number)

17304 Preston Road  
Building E-100  
Dallas, Texas 75252  
(Address of Principal Executive Offices)  
(214) 733-8800  
(Registrant's Telephone Number, Including Area Code)

**SECURITIES REGISTERED PURSUANT TO  
SECTION 12(b) OF THE ACT:**

None  
(Title of Class)

Not Applicable  
(Name of Exchange on Which Registered)

**SECURITIES REGISTERED PURSUANT TO  
SECTION 12(g) OF THE ACT:**

Common Stock  
\$0.01 Par Value  
(Title of Class)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ☒ ]

As of February 14, 1992, there were 10,150,143 shares of Amtech Corporation \$0.01 par value Common Stock issued and outstanding, 8,148,052 of which having an aggregate market value of \$203,851,300 were held by non-affiliates. For purposes of the above statement, all directors and officers of the Registrant are presumed to be affiliates.

Portions of the Proxy Statement for the Registrant's 1992 Annual Meeting of Shareholders are incorporated by reference into Part III of this Form 10-K.



## Part I

### Item 1. Business

#### Overview

The Company designs, manufactures, markets and supports a line of hardware and software products and provides related services involving radio frequency electronic identification ("RFID") technology. The Company believes its proprietary RFID technology permits remote automatic identification of and communications with objects such as automobiles and rail cars at higher speeds, at longer distances, and in more difficult outdoor and industrial environments than technologies based on optical, magnetic, or other techniques. See "Technology." The Company has initially targeted five markets within the transportation and shipping industries for its RFID products and services: rail transportation, electronic toll and traffic management, intermodal transportation, vehicle fleet management and access control, and air freight. See "Industry and Markets." The Company's strategy is to establish its technology as the leading electronic identification technology in each of its targeted markets. As part of this strategy, the Company has encouraged various national and international standard setting organizations to adopt industry standards that are compatible with the Company's proprietary RFID technology. See "Industry Standards." The Company currently markets its products and services directly and through more than forty domestic and international distributors, subdistributors and dealers, as a subcontractor on certain projects, and through a European joint venture.

The Company, a Texas corporation, was incorporated in January 1988 and is the successor in interest by various merger transactions to a New Mexico corporation of the same name which was incorporated in November 1983. The Company's executive offices are located at 17304 Preston Road, Building E-100, Dallas, Texas 75252 (telephone (214) 733-6600). The Company has five direct and indirect wholly owned subsidiaries: Amtech Systems Corporation, Amtech World Corporation, AMGT Corporation, Amtech GmbH and Amtech B.V. Unless the context otherwise requires, all references herein to the "Company" shall include Amtech Corporation, its wholly owned subsidiaries, and their predecessors.

#### Technology

RFID technology remotely identifies an object through the use of radio frequency signals rather than bar codes, magnetic cards, or other means. A small transponder device ("tag") is attached to an object, and when that object passes an interrogator ("reader"), an identification code is retrieved electronically from the tag through a technique referred to as "modulated backscatter." Specifically, a radio signal emitted by the reader system prompts the tag to modulate the signal with a unique code and reflect the modulated signal to the reader at the same frequency. Each tag may be programmed to carry information concerning the object to which the tag is attached, which the reader recognizes by identification of the signal when the tag passes the reader. Data in certain tag types may also be modified dynamically by the reader system using "read-write" RFID technology. This latter capability is considered important by the Company in certain electronic toll collection, traffic management, and rail applications.

The Company believes RFID technology is superior to other forms of automatic identification technology in a number of respects. Unlike optical and magnetic identification technologies (such as bar codes and inductive cards), which require that the object to be identified be essentially stationary and in close proximity to the reader, RFID technology permits identification of objects